



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,732	04/18/2008	Sarbjee Kaur	Q92536	7733

23373 7590 08/05/2011
SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

WEIER, ANTHONY J

ART UNIT	PAPER NUMBER
----------	--------------

1781

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

08/05/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com
PPROCESSING@SUGHRUE.COM
USPTO@SUGHRUE.COM

Office Action Summary	Application No. 10/562,732	Applicant(s) KAUR ET AL.	
	Examiner ANTHONY WEIER	Art Unit 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,7,8,10 and 13-33 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4,7,8,10,13,14 and 25-33 is/are allowed.
- 6) ☒ Claim(s) 15-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-4, 7, 8, 10, 13, 14, and 25-33 are allowed.
2. The following is an examiner's statement of reasons for allowance for the process claims as set forth above in addition to those recited in the last Office Action (mailed 3/17/11, i.e. claims 26-28). The amendment of said claims has overcome the rejections under 35 USC 112, 1st and 2nd paragraphs, thus releasing all of the process claims from any rejections.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 15-18, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/11143.

WO 99/11143 discloses a food product containing lupin protein wherein same is used as a replacement for other protein sources in food (see Examples). Because lupin protein as a food is a nutritive source, it is further considered to be a nutritional

Art Unit: 1781

supplement when employed in foods as called for in claim 17. It should be noted that said claims are product claims and the lupin protein content of foods in WO 99/11143 would naturally include the lupin protein extract or isolate derived from instant claim 1 even though same would be only a portion of the lupin protein contained in the food products of WO 99/11143. Claim 15, 17, and 23 make no distinction that the food product must only contain the lupin protein extract produced by claim 1. Note that these product claims refer to "containing a lupin protein" wherein "containing" is commensurate with the open claim language of "comprising".

It is noted that the product claims now call for same to be produced from lupin meal or flour which has not been treated with an organic solvent to remove fat or oil from said meal or flour. It should be noted that said claims do not require that the product be defatted per se; rather, same require that they not be defatted using an "organic solvent". As such, the product claims (and process claims) remain open to a product which is either not defatted or which has been defatted by means that does not entail use of organic solvent such as, for example, by using supercritical carbon dioxide. Since the process claims, and, therefore, the product claims leave open the option of a defatted lupin product, the product of WO 99/11143, which is defatted (by unknown means) falls within the scope of said product claims.

5. Claims 15, 17, 18, and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's own admission.

Applicant admits the use of lupin protein extracts in foods (as additives) and in feedstock (paragraphs 3-5). Because lupin protein as a food is a nutritive source, it is

Art Unit: 1781

further considered to be a nutritional supplement when employed in foods as called for in claim 17. It should be noted that said claims are product claims and the lupin protein content of a general extraction would naturally include the lupin protein extract derived from instant claim 1 even though same would also contain other components including lupin fibre. Said claims make no distinction that the food product must only contain the particularly refined lupin protein extract produced by claim 1. Note that these product claims refer to "containing a lupin protein" wherein "containing" is commensurate with the open claim language of "comprising".

It is noted that the product claims now call for same to be produced from lupin meal or flour which has not been treated with an organic solvent to remove fat or oil from said meal or flour. It should be noted that said claims do not require that the product be defatted per se; rather, same require that they not be defatted using an "organic solvent". As such, the product claims (and process claims) remain open to a product which is either not defatted or which has been defatted by means that does not entail use of organic solvent such as, for example, by using supercritical carbon dioxide. Since the process claims, and, therefore, the product claims leave open the option of a defatted lupin product, the product of Applicant's own admission, which is defatted (by unknown means) falls within the scope of said product claims.

6. Claims 15-18, 23, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by King et al (Journal of Food Science, Vol. 50, 1985).

King et al discloses a product produced by a process wherein lupin flour undergoes an alkali treatment (pH 8.6) followed by separating refuse from the

Art Unit: 1781

supernatant (which is essentially the extract of alkali soluble protein called for in step (b) in instant claim 1, the fibrous portion being the refuse), said supernatant then being treated with acid at a pH of, for example, 4.9 wherein a lupin protein extract is precipitated and collected (PF1 as called for in the instant claims; same would be food grade as it is later used in food preparations; see "Conclusions" on page 86). The collected lupin protein extract is then treated to a pH of, for example, 7 and subsequently dried to provide a protein isolate (see page 82, "Preparation of Isolates"; page 83, Fig. 1). King et al further discloses foods which may contain said lupin protein isolates including its use in "milk substitute formulations for nutritional purposes" (see "Conclusions").

It is noted that the product claims now call for same to be produced from lupin meal or flour which has not been treated with an organic solvent to remove fat or oil from said meal or flour. It should be noted that said claims do not require that the product be defatted per se; rather, same require that they not be defatted using an "organic solvent". As such, the product claims (and process claims) remain open to a product which is either not defatted or which has been defatted by means that does not entail use of organic solvent such as, for example, by using supercritical carbon dioxide. Since the process claims, and, therefore, the product claims leave open the option of a defatted lupin product, the product of Applicant's own admission, which is defatted (by unknown means) falls within the scope of said product claims.

Claim Rejections - 35 USC § 103

Art Unit: 1781

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 15-18, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/11143 taken together with Wasche et al (U.S. Patent No. 6335044).

As discussed above, WO 99/11143 does disclose use of a lupin material that has been defatted. However, the method used to provide same is not specified. If it is shown that defatting a lupin product using supercritical carbon dioxide would produce a product differing from that wherein defatting occurs using an organic solvent, the following should be noted. Since WO 99/11143 is silent regarding such defatting procedure and, therefore, open to any defatting procedure, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of the invention to have produced a lupin product from a process wherein same is defatted using supercritical carbon dioxide, an inorganic solvent, as a matter of preference among known alternative as taught, for example, by Wasche et al (e.g. claim 9) and wherein such choice may be dependent on, for example, the availability of one method over the other or depending on the cost of one over the other.

9. Claims 15, 17, 18, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's own admission taken together with Wasche et al (U.S. Patent No. 6335044).

Art Unit: 1781

Applicant's admission does not specify that the product is defatted, let alone the means by which defatting is achieved. If it is shown that defatting a lupin product using supercritical carbon dioxide would produce a product differing from that wherein defatting occurs using an organic solvent, the following should be noted. Since Applicant's own admission is silent regarding such defatting procedure and, therefore, open to any defatting procedure, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of the invention to have produced a lupin product from a process wherein same is defatted using supercritical carbon dioxide, an inorganic solvent, as a matter of preference among known alternative as taught, for example, by Wasche et al (e.g. claim 9) and wherein such choice may be dependent on, for example, the availability of one method over the other or depending on the cost of one over the other.

10. Claims 15-18, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al taken together with Wasche et al (U.S. Patent No. 6335044).

King et al does disclose use of a lupin material that has been defatted. More specifically, the method used to provide same is not explained or suggested. If it is shown that defatting a lupin product using supercritical carbon dioxide would produce a product differing from that wherein defatting occurs using an organic solvent, the following should be noted. Since King et al is silent regarding such defatting procedure and, therefore, open to any defatting procedure, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of

Art Unit: 1781

the invention to have produced a lupin product from a process wherein same is defatted using supercritical carbon dioxide, an inorganic solvent, as a matter of preference among known alternative as taught, for example, by Wasche et al (e.g. claim 9) and wherein such choice may be dependent on, for example, the availability of one method over the other or depending on the cost of one over the other.

11. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krinski et al alone or taken together with Wasche et al.

Krinski et al discloses the use of pea protein in adhesives used in paper coatings (col. 3, lines 45 and 46). Lupins are from the pea family and a known source of protein in extracted form and typically containing fiber (Applicant's own admission, paragraphs 2-6). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed a lupin protein extract as a matter of preference depending on, for example, cost or availability. It should be noted that said claims are product claims and the lupin protein content of a general extraction would naturally include the lupin protein extract derived from instant claim 1 even though same would also contain lupin fibre. Claim 19 makes no distinction that the food product must only contain the particularly refined lupin protein extract produced by claim 1.

It is noted that the product claims now call for same to be produced from lupin meal or flour which has not been treated with an organic solvent to remove fat or oil from said meal or flour. It should be noted that said claims do not require that the product be defatted per se; rather, same require that they not be defatted using an "organic solvent". As such, the product claims (and process claims) remain open to a

Art Unit: 1781

product which is either not defatted or which has been defatted by means that does not entail use of organic solvent such as, for example, by using supercritical carbon dioxide. Since the process claims, and, therefore, the product claims leave open the option of a defatted lupin product, the product of Applicant's own admission, which is defatted (by unknown means) falls within the scope of said product claims.

Krinski et al discloses use of a pea protein which is essentially fat-free as whole peas themselves have very low fat content. More specifically, no method of defatting is explained or suggested. If it is shown that defatting a lupin product using supercritical carbon dioxide would produce a product differing from that wherein defatting occurs using an organic solvent, the following should be noted. Since Krinski et al is silent regarding such defatting procedure and, therefore, open to any defatting procedure, absent a showing of unexpected results, it would have been obvious to one having ordinary skill in the art at the time of the invention to have produced a lupin product from a process wherein same is defatted using supercritical carbon dioxide, an inorganic solvent, as a matter of preference among known alternative as taught, for example, by Wasche et al (e.g. claim 9) and wherein such choice may be dependent on, for example, the availability of one method over the other or depending on the cost of one over the other.

12. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al (as discussed above) taken together with Krinski et al.

Claims 19 and 20 further call for a paper coating that includes said lupin protein extract. Krinski et al teaches the use of lupin protein in adhesives used in paper

Art Unit: 1781

coatings (see "pea protein", col. 3, lines 45 and 46). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the lupin protein extract of King et al in a paper coating as a known use for such material.

13. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al (as discussed above) taken together with Applicant's own admission or Bertram et al.

Claims 21 and 22 further call for a feed that includes said lupin protein extract. Bertram et al teaches the use of pea protein (e.g. lupin) in animal feeds (e.g. claim 3). Applicant admits lupin protein use in feedstock (paragraph 3). It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed the lupin protein extract of King et al in animal feed as a known use for such material.

Response to Arguments

14. Applicant's arguments filed 7/18/11 have been fully considered but, except those regarding the previously applied rejections under 35 USC 112, 1st and 2nd paragraphs, they are not persuasive and have been addressed in view of the rejections as set forth above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY WEIER whose telephone number is (571)272-1409. The examiner can normally be reached on Monday-Friday.

Art Unit: 1781

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anthony Weier
Primary Examiner
Art Unit 1781

/Anthony Weier/
Primary Examiner, Art Unit 1781

Anthony Weier
July 29, 2011